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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,226	12/12/2001	Daniel R. McClure	McClure-2	1120

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EXAMINER	
WONG, ALLEN C	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,226	MCCLURE, DANIEL R.	
	Examiner	Art Unit	
	Allen Wong	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/15/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 4, 5, 10, 15 and 16 are objected to because of the following informalities: the term "conFIG.d" needs to be changed to "configured". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 4, 5 and 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Pala (6,304,173).

Regarding claim 1, Pala discloses a rear-view display system for vehicle comprising:

a camera disposed near a rear of the vehicle, the camera being generally rearward facing (fig.1, element 50);

a display in the general form of a rear-view mirror, the display being disposed near a top center portion of a windshield of the vehicle, the display being configured to display a video image acquired by the camera (col.2, ln.57-62, note rear camera 50 obtains distant view 54 that gathers image data similar to rear-view mirror, and that display 24 is near a top center portion of a windshield);

at least one position sensor coupled to the display (col.4, ln.43-45; Pala discloses element 92 is a positioning circuitry 92 or position sensor that is interactively coupled to the display 24); and

a servo system coupled to the camera, the servo system being configured to control the direction of the camera based upon information obtained from the at least one position sensor (col.4, ln.43-50, Pala discloses that in fig.2, there is a servo system that is configured to control camera 50 depending on information from positioning circuitry 92 to instruct the motor 52 to move camera 50 to the proper direction, where elements 52, 92 function interactively with element 84 to provide a clear display of the image data, obtained by camera 50, at element 24).

Regarding claim 4, Pala discloses a controller configured to generate at least one control signal to control the servo system, thereby control the direction in which the camera points (col.4, ln.43-50, Pala discloses that in fig.2, there is a servo system that is configured to control camera 50 depending on information from positioning circuitry 92 to instruct the motor 52 to move camera 50 to the proper direction, where elements

52, 92 function interactively with element 84 to provide a clear display of the image data, obtained by camera 50, at element 24; col.4, ln.50-56, Pala discloses the user can use element 78 for controlling the direction of the camera).

Regarding claim 5, Pala discloses the controller is configured to point the camera in a direction that closely parallels the direction of the display, as determined by the at least one position sensor (col.4, ln.43-50, Pala discloses that in fig.2, there is a servo system that is configured to control camera 50 depending on information from positioning circuitry 92 to instruct the motor 52 to move camera 50 to the proper direction, where elements 52, 92 function interactively with element 84 to provide a clear display of the image data, obtained by camera 50, at element 24).

Regarding claim 14, Pala discloses the use of a LCD, flat-panel, plasma CRT, or other well known types of displays (col.2, ln.13-16).

Regarding claim 15, Pala discloses a rear-view display system for a vehicle comprising:

a camera disposed near a rear of the vehicle, the camera being generally rearward facing (fig.1, element 50); and

a display in the general form of a rear-view mirror, the display being disposed near a top center portion of a windshield of the vehicle, the display being configured to display an image acquired by the camera (col.2, ln.57-62, note rear camera 50 obtains distant view 54 that gathers image data similar to rear-view mirror, and that display 24 is near a top center portion of a windshield).

Regarding claim 16, Pala discloses further including:

at least one position sensor coupled to the display (col.4, ln.43-45; Pala discloses element 92 is a positioning circuitry 92 or position sensor that is interactively coupled to the display 24); and

a servo system coupled to the camera, the servo system being configured to control the direction of the camera based upon information obtained from the at least one position sensor (col.4, ln.43-50, Pala discloses that in fig.2, there is a servo system that is configured to control camera 50 depending on information from positioning circuitry 92 to instruct the motor 52 to move camera 50 to the proper direction, where elements 52, 92 function interactively with element 84 to provide a clear display of the image data, obtained by camera 50, at element 24).

Regarding claim 17, Pala discloses the rear-view display system is used in a vehicle (see fig.1, note Pala uses the rear-view display system in a car, van, sport utility vehicle, or any other vehicle).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pala (6,304,173) in view of Masunaga (5,838,368).

Regarding claims 2-3, Pala does not specifically disclose the servo system comprising two motors. However, Masunaga teaches the use of a servo system that

comprises two motors, wherein one motor controls the horizontal direction of the camera, and another motor controls the vertical direction of the camera (see fig.11 and col.21, ln.10-15). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Pala and Masunaga, as a whole, for facilitating the use of adjusting the camera to point in the desired direction when obtaining image data in a quick, efficient manner (Masunaga col.7, ln.52-61).

Regarding claims 6-9, Pala does not specifically disclose the use of a zoom lens. However, Masunaga teaches the use of a zoom lens (fig.11, element 402 and col.21, ln.16-19 where zoom operation device 418 permits the zoom in or out of the acquired image data; col.19, ln.11-12, note the zooming operations have two options in that "+" and "–" represents the increasing and decreasing the zooming magnitude). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Pala and Masunaga, as a whole, for facilitating the use of adjusting the camera to zoom on the desired image data to obtain a clearer view by utilizing in a quick, efficient manner (Masunaga col.7, ln.52-61).

3. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pala (6,304,173) in view of Cooper (5,016,098).

Regarding claims 10-13, Pala does not specifically disclose the fluid ejection mechanism configured to remove debris from the camera. However, Cooper teaches the use of a fluid ejection mechanism or fluid jet to remove debris from the camera (col.5, ln.1-9, Cooper discloses that fluid can be ejected to prevent the camera head from fogging or remove debris from camera lens by ejecting liquid, ie. water, to clean

the camera lens, so clearly, Cooper must disclose the fluid storage area or fluid resevoir to send the fluid to the fluid jet or ejection nozzle for fluid ejection). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Pala and Cooper, as a whole, for permitting the ejection of fluids to clean the camera by removing debris so as to obtain a clear, proper view of the image data obtained by the camera in order to properly assess the situation of the task at hand (Cooper col.1, ln.63-67).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allen Wong
Examiner
Art Unit 2613

AW
11/17/04